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V. VITAMIN G

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Since Goldberger's pronouncement, considerable research has been devoted to resolution of the vitamin B complex and, what is equally important, to testing the specificity of vitamin G in the cure of human pellagra (2).

The findings in the laboratory and clinic have not, in some respects, been entirely in accord (3).

As reports of further investigations appeared in the literature, it became clear that the vitamin B complex had been aptly named. At one time claims were made for the existence of as many as eight factors in this complex (4).

While later work has reduced this number, we know today that what has been consid-

ered in the past as vitamin G is, in reality, a combination of several factors. A relation between experimental cataract and vitamin G has been described and, recently, another associated factor was postulated (5).

The significance of these individual factors in human nutrition has not as yet been established. However, regardless of this fact, students of nutrition are agreed that we must provide for the inclusion of so-called vitamin G—admittedly a complex—in the daily dietary. It is also obvious that until more is known about the individual components of the complex, we must continue to depend upon present day bioassay methods to determine the "vitamin G" potencies of foods.

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- (1) 1926. U. S. Pub. Health Report, 41, 297.
 (2) 1934. Am. J. Med. Sci., 147, 512.
 1935. J. Am. Med. Assoc., 104, 1377.
 (3) 1932. J. Am. Med. Assoc., 99, 120.

- (4) 1933. J. Nutrition, 6, 559.
 (5) 1934. J. Nutrition, 7, 97.
 1936. Science, 83, 17.

- (6) 1932. J. Nutrition, 5, 307.
 1932. Ind. Eng. Chem., 24, 457.
 (7) 1932. J. Am. Med. Assoc., 99, 95.

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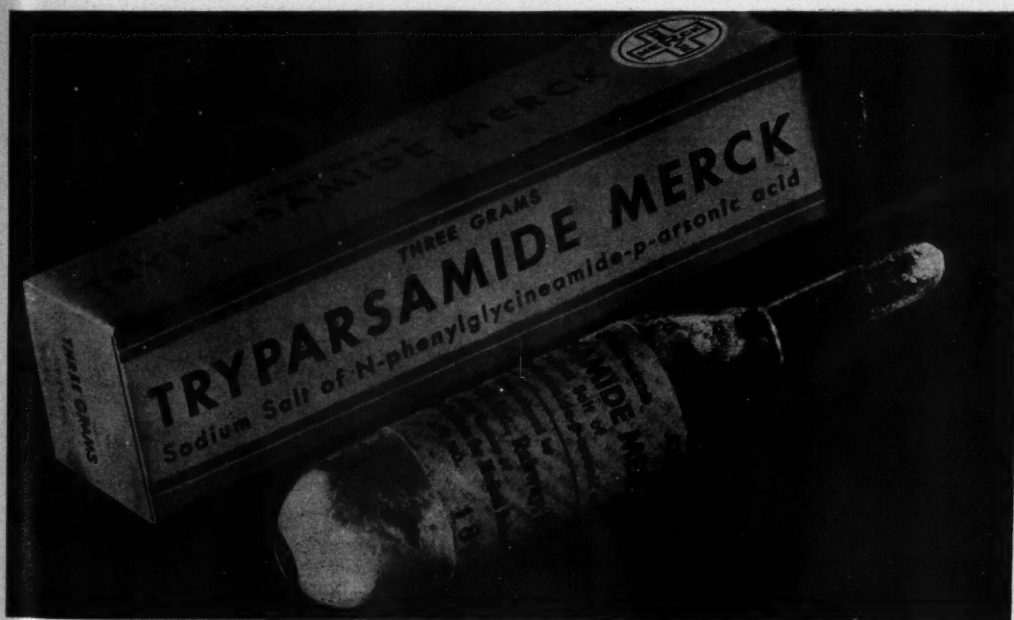
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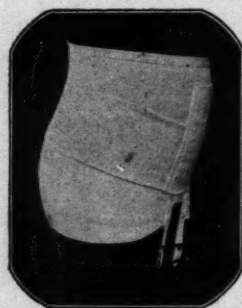
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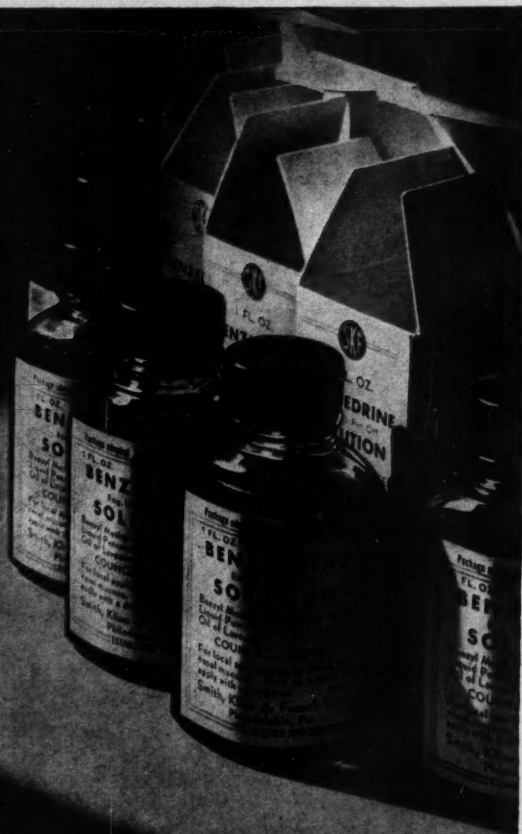
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THE BARBER SURGEONS AMONG THE EARLY DUTCH AND SWEDES ALONG THE DELAWARE*

SAMUEL X. RADBILL, M. D.
Philadelphia

The first medical figures to arrive in this section of the country with the Swedish and Dutch settlers were barber surgeons, or "balbieren," as they were termed in the Germanic tongues of that time. These masters not only shaved, but performed the commoner, everyday medical and surgical procedures, developing a degree of practical efficiency that in many instances outclassed the academic physicians of their times. It is only necessary to recall that Ambrose Pare, who became the father of modern surgery, had been originally a barber's apprentice, to be assured of the propriety with which the barber surgeons were generally employed by the people at large. They corresponded to the general practitioner of the present day, prepared themselves in the arts of medical practice by diligent study and prolonged apprenticeship, restricted from their guilds those inadequately prepared for the practice of their profession, and provided the public masses with medical care not any worse than that which the more lordly classes received from the more pretentious faculty. Figure 1, with its appended poem** which I have rather loosely translated, gives a fair idea of the 16th century barber and his diversified duties. When any group of colonists was prepared for emigration, sick-

ness on the voyage and after was to be expected, so the Dutch and Swedish West India Companies always hired doctors to accompany the various expeditions to America. Some remained in the new world with the settlers and others returned with the returning ships. The preserved records give us only meagre details about these, but from the slight amount of information thus gleaned, an inkling of the type of medical care offered can be apprehended.

In 1608 Champlain laid the foundation of the French claims to Canada and about the same time the Dutch planted New York and the British founded Virginia. About this time, too, the Englishman, Henry Hudson, in the service of the Dutch East India Company, explored the Atlantic seaboard, discovered the Delaware Bay, and soon after, the Hudson River, and instigated the establishment of New Amsterdam at the mouth of the Hudson somewhere around the year 1621. From this primary focus Holland began to progress southward over the lands bordering both sides of the Delaware, which they called the South River in contra-distinction to the North River; viz., the Hudson. In 1623, to protect their settlers they built their first fort on the Delaware, Fort Nassau. Here, at the present site of Gloucester, in New Jersey, probably sprang up a village.

Late in the fall of 1637, Peter Minuet, a Dutchman in command of two ships, the Kalmar Nyckel and The Fogel Grip, left Gottenburg, Sweden, under the patronage of the Swedish West India Company and arrived at the South River the following spring, buying land along the west side of the Delaware from an Indian chief for the round sum of one copper kettle. This was March 29, 1638. Fort Christina, the future city of Wilmington, was built and the colony named New Sweden. Thus

* Reprinted, by special permission, from the *Bulletin of the Institute of the History of Medicine*, November, 1936. The seven figures are omitted.

**I am called on many a behalf
Can make many a curative salve;
Can heal fresh wounds with right good grace,
And old hurts too, as well as bone breaks;
Heal the French pox and needle a cataract,
Quench Anthony's Fire and teeth extract;
Likewise shave, massage and trim,
And open veins at anybody's whim.

From: *Der Arzt und die Heilkunst in der deutschen Vergangenheit*, Herman Peters, Leipzig, 1900, p. 78.

were established the opposing settlements of the Dutch and the Swedes along the Delaware.

For the first Swedish expedition two barber surgeons were hired at Amsterdam. (1) The first page of the Journal of the New Sweden Co., giving items of expenses connected with the first expedition records that 10 Riksdaler (about \$12.00) was paid to Dr. Hanns and 8.40 Rd. went for medicaments. The doctor mentioned was a barber-surgeon, Hans Janeke, who, arriving March 29, 1638, was apparently the first surgeon along the Delaware. How long he remained here this trip I am unable to discover but we shall find him making at least two more voyages to New Sweden as our story develops.

The first year, the colony at Fort Christina seems to have been quite prosperous, but the year following the country was depressed by disease, attributed to severe climatic conditions. No doubt the colony's first clergyman, Reorus Torkillus, was called upon to exert the medical skill in which most of the ministry of that period were comparatively well trained, for we do not know whether the company's barber surgeon remained with the colony long enough to be of service during this trying time. The Swedes could have called to their aid, however, the barber surgeon Jan Pieter-son, who was at this time stationed up the river at Fort Nassau.

This gentleman had received the appointment as Surgeon to the Dutch colony at the South River June 3, 1638. His term of service began July 10, 1638 at the stipulated salary of ten florins (\$4.00) per month, and lasted two years until his death. (2) Through the kindness of Mr. A. J. F. Van Laer, Archivist at the State Department of Education, Albany, N. Y., I am enabled to present the following copy, with slight changes, of E. B. O'Callaghan's manuscript translation of the will of Jan Pieter-son Van Essendelft, formerly recorded in Vol. 1, p. 199, of the New York Colonial Manuscripts, which volume was destroyed in the Capitol fire of March 29, 1911.

WILL OF JAN PIETERSON VAN ESSENDELFT

In the name of the Lord, Amen. Before me, Cornelis van Tienhoven, secretary in the New Netherland appointed by the Chartered West India Company, appeared Jan Pieter-son van Essendelft,¹ at his house in Fort Amsterdam, lying sick in bed, yet in full possession of his memory, understanding and speech, who, reflect-

ing and meditating on the shortness of human life and that nothing is more certain than death and nothing more uncertain than the hour thereof, commends his soul into the hands of Almighty God, who has created and formed heaven and earth and all that has life out of nothing, and his body to a Christian burial. Furthermore, being desirous to anticipate the uncertainty of death by certain testamentary disposition and while living to dispose by last will of his sailor's clothes and of his earned monthly wages due him by the honorable West India Company, he, the testator, accordingly gives and bequeaths to Gerrit Bartelsen, who attended him in his sickness, the sum of twenty guilders, his chest with two coverlets, one pillow and one otter; to Claes Groen one sheet; to Martin Harmanse, mason, two pairs of stockings, one blue undershirt and one blue pea-jacket; and to Kersten Jansen two woolen and one pair of linen breeches. After his (the testator's) death, Master Hans Kierstede shall take possession of all the surgical instruments belonging to him, the testator, and have the right to dispose thereof as his own property, forever. He, the testator, also gives and bequeaths to his brother Adriaen Pieter-son and his sister Anna Pieter-son all such monthly wages as the honorable company shall owe him after his death. All of which he, the testator aforesaid, declares to be his last will and testament, desiring that the above-named persons shall possess the goods left to each of them as a legacy as their own property and praying and requesting that these presents may have effect and be valid before all courts, judges and justices. Done this 10th of April Anno 1640, in Fort Amsterdam in New Netherland. This is signed by the testator and the subscribing witnesses.

Jan Pieter-son.

Ulrich Lapolt, witness
David Provoost, *idem*

It is interesting to note the fraternal spirit of friendship in the legacy to Master Hans Kierstede. Kierstede was a barber surgeon who had arrived at Manhattan early in 1638, married the daughter of a famous New Amsterdam midwife and successfully practiced in that colony for some thirty years. Jan Pieter-son's chief claim to fame rests in his being accorded the honor of first surgeon along the Delaware by the local historians up to this time. However, in view of the Swedish records, unearthed at Stockholm, it appears that Hans Janeke as barber surgeon of the first expedition, preceded him by at least three months.

It is hard to decide what disease so harassed these early settlers. Noah Webster stated that between the years 1632 and 1637 Europe and America were severely annoyed by pes-

¹Probably intended for Assendelft, the name of a village in the province of North Holland and also a village in the province of North Brabant. Van Assendelft is a well-known name in the Netherlands, so that it is uncertain whether "van Essendelft" was the surgeon's family name, or indicates that he came from one of the two villages mentioned above.

tilential diseases and quotes Winthrop as relating that 1800 people died in Virginia during the year 1635. (3) The yellow fever, of course, was endemic all along the coast of North America, long before the coming of the white man, and is known to have raged among the Indians of New England so early as 1618. Malaria, certainly along the low marshy regions close to the river, ran rampant at the proper season of the year and we frequently read of the inhabitants complaining of the agues. Indeed, this was the disease that Dr. James J. Leveck (4) accused of breaking up an entire English Settlement in 1641 near the present site of Salem, New Jersey. Pestiferous mosquitoes made untenable the Swedish fort at Helsingborg on the Delaware. The spot was nicknamed Myggenborg, or Mosquito Fort.

Even before the first emigrants arrived, the native Indians, among other benefits of civilization, had been gifted by the early Spaniards with the small pox, a disease which played havoc among the susceptible redskins. Captain Dermer, an English adventurer sailing along the middle Atlantic Coast during the spring of 1619 on his way from the North to Virginia, found many Indian towns totally depopulated, while in others but few natives remained alive; but "not free of sickness," he says. "Their disease, the plague, for we might perceive the sores of some that had escaped" (I presume he referred to the poek marks), "who described the spots of such as usually die." (5)

The winter of 1642 was very severe and the summer following very unhealthy on the Delaware River. Winthrop, in his famous journal, noted that both Dutch and Swedes were greatly afflicted and that the mortality among the settlers from New Haven who had not long been in the country was so great, it broke up the settlement. Governor Printz of New Sweden thought so many people died in 1643 because they had such hard work and little to eat. "Afterwards," he wrote, "since board had been given them, besides wages, they have been doing well." (6) According to the Dutch account at this time the number of men was reduced to 80 or 90 all told.

In the budget drawn up the 30th of August, 1642, by Johann Printz, the newly commis-

sioned Governor of New Sweden, among the 183 inhabitants there resident, a surgeon was included in the list, together with a preacher, a clerk and a hangman. (7) This Esculapian must have been the barber, Mr. Timon Stidden.² He came over on one of the first five Swedish expeditions which arrived during the years between 1637 and 1642, and returned on the ship *Fama* in 1644. Upon his arrival in Stockholm, he was paid by Trotzig, agent of the New Sweden Company, 468.19 Riksdaler, a considerable sum which must have taken four or five years service in the Company to accumulate. From this I judge that Stidden may have dwelt upon the shores of the Delaware during this, his first stay, for at least the four or five years preceding 1644.

When the sixth Sweden expedition was being organized, the barber, Hans Janeke, from Koenigsbergh, was hired to go to the colony and was on the payroll of the crown in 1643-44 as barber surgeon at 180 dalers. 60 dalers was given for the preparations of his medicine chests. Johan Papegoja, the barber surgeon Hans Janeke, a number of soldiers and a few colonists arrived with this expedition.

Arriving in New Sweden in the service of the crown on March 31, Janeke (or Janneke as his name was sometimes spelled) replaced Timon Stidden, who was doubtless glad of an opportunity to revisit his native land. Janeke apparently remained with the colony until Stidden's return ten years later, for the records in Sweden mention that Janeke returned in 1654. During his service at South River, he dwelt at Fort Christina, but the practice of medicine as well as surgery, in all likelihood called him to many points at a distance from this primitive trading post.

October 1, 1646, the vessel "Gyllene Haj" (Golden Shark) arrived bringing the seventh expedition. The master of the ship, the mate and all the people, except one man, were sick. Likely enough, among other ailments, they were suffering from scurvy. They did not recover until the following December, after which the people were all reported to be in good health, a mortality of but two men and two small children being included in the governor's report of the following year. (9)

² Various spelled: as, for example: Stiddem, Steddin, Stidhem, Stedham, etc.

In 1648 came the eighth expedition on the ship "Swan." A barber-surgeon, Mr. Friedrich Hans Kock, was engaged to go to New Sweden on this expedition and his medicine cases were fitted out and medicine was bought on Hans Janeke's memorial, to the value of 83 Riksdaler. Kock did not remain in New Sweden, but returned with the ship in 1648.

The ship "Katt" was fitted out in 1649 for the ninth expedition. Among the more prominent colonists secured for this unfortunate party was the barber-surgeon, Timon Stidden. The boat on which he sailed was shipwrecked and the passengers were dispersed among the ill-disposed Spaniards, and later the French, by whom they were miserably treated and only very few survived to eventually reach Sweden again. After about two years Timon Stidden managed to get to Amsterdam with his wife and children. He arrived in most miserable circumstances and was aided by Trotzig, the factor of the New Sweden Company in Holland at the time. From Holland, Stidden was brought to Sweden by a ship captain.

Apparently undaunted by these harrowing experiences, when preparations were begun in 1653 for the next expedition Timon Stidden was on hand to be included on the company list as barber-surgeon. A ship called the "Oern" (Eagle) was finally fitted out with 350 persons aboard, and on January 7, 1654, after many mishaps at the start, left for New Sweden. During the voyage dysentery and ague laid waste the passengers, killing many. By the 10th of April no fewer than 250 people were sick. They ultimately cast anchor at Fort Casimir (now New Castle, Del.) on May 21, 1654.

Heelmeester Stidden landed with this expedition. After having wrested with the many maladies which assailed the passengers throughout the voyage, he arrived only to find the few settlers still remaining here in a miserable plight. Not only had many persons returned to Sweden with Governor Printz the preceding year, but many had gone off to Virginia and others had died, so that only about 70 inhabitants were left. Among the latter was probably Hans Janeke, for, in reporting home to Oxenstiern two months later, Director Rising wrote, "the barber surgeons

were busy caring for those in greatest need, while superintending the treatment of others," thus indicating the presence of other healers besides the newly arrived Timon Stidden. Janeke, however, soon after conditions were improved, left his colleague in full charge and returned to Sweden, his name being mentioned in the Journal of the Company as returning in 1654.

It was at this time that an epidemic (probably small pox) broke out among the Indians which the natives attributed to the new arrivals. Although the Indians were well satisfied with the Swedes, they remarked that they had received sickness from the ship through which they feared that all their people would perish. Fire had been seen around the vessel at night and the savages believed that an evil spirit had come on the ship. A chief asked for a boat for two medicine men who should go down to take the spirit away but it seems no boat was available.

Timon Stidden who continued as the barber-surgeon in the colony from this time on, appears to have been educated in the arts and sciences of medicine and surgery in Europe. He is said to have come from Hammel which Amandus Johnson believes is the town of Hammal, North of Sundsvall, Sweden. His mother lived in Stockholm in 1641. During his first stay in the colony of New Sweden (which lasted until 1644) he brought a report to the Swedish Governor that an Englishman named Lamberton, then trading in the Delaware with the Indians, was conspiring with the natives to murder the Dutch and Swedes and destroy their settlements. Having some knowledge of the Indian language, he was sent with another man as a spy and at the trial of Lamberton, later, testified that he had heard the Indians say that they had been bribed and that Lamberton had promised to sell arms and powder to the savages.

For the year 1655 he received from the company fifteen Riksdaler per month compensation (about eighteen dollars) in silver as compared to the salary of the commandant which amounted to seventy-five Riksdaler monthly. Not satisfied with this small return from his professional duties, he quickly took profitable advantage of trading opportunities in the new colonies and we frequently find his

name in the minutes of the administration of the vice-director and his council at the Delaware. Among a group of others, he signed a trade agreement at the beginning of the year 1657 setting prices on various items for the ensuing year. In January 1656 he was ordered to give an "affidavit of the cure" of some soldiers on the South River. (10)

In 1655 the ship "Mercurius" was obtained and Heindrich Mundt was hired as the barber-surgeon for the twelfth expedition. The eleventh expedition, which had set out in 1654, never did reach New Sweden. Among the passengers on the Mercurius was listed also our friend Hans Janeke. The ship was at sea nearly four months, but the journey seems to have been rather free from casualties and sufferings so common to former voyages, for there is no mention of sick people when the vessel sailed up the Delaware on March 14, 1656. By this time the control of the lands about the South River was completely in the hands of the Dutch. Surgeons Mundt and Janeke did not stay here, under these circumstances, but Timon Stidden remained and treated the ill and wounded to the best of his abilities.

This was approximately the time when the second pandemic of influenza spread over the entire known American continent and scarcely a family at New Amstel, the Dutch stronghold on the Delaware, was exempted; children, as well as adults, were simultaneously afflicted. Other physicians were living at New Amstel at this time, notably the barber, Jan Oosten (or Oosting), who is mentioned in the Dutch records of 1657, (10A), and probably died the following year; and William van Rassenburgh, who was surgeon to the Dutch colony from November 3, 1659, to February 4, 1662. (11) These were the two who were mentioned by Vice-director Alrichs in letters written in September 1658, from which the following is extracted:

"New Amstel and the surrounding country suffered much from sickness as well as other causes. Our actual situation, which is certainly very distressing by an ardent prevailing fever, and other diseases, by which the large majority of the inhabitants are oppressed and broken down, besides that our barber surgeon³ died and another⁴

well acquainted with his profession, is very sick." (12)

Alrichs also wrote that

"William Van Rasenburgh, who came over as a surgeon, puts forth sundry claims against people whom he attended on the passage, inasmuch as his wages did not run at the time and on the voyage, and he used his own provisions. There was on board the ship considerable sickness, accidents and hardships in consequence of a tedious voyage. One hundred souls required at least a hogshead or two of French wine and one of brandy, and a tub of prunes had also to be furnished for refreshments and comfort to those sick of scurvy and suffering from other troubles throughout the protracted voyage, for from want thereof people became so low that death followed which is a pretty serious matter. Here, on shore, I see clearly that the poor, weak, sick or indigent, sometimes have need of this and that to support them, which one cannot easily, or will not refuse; though it be sometimes but a spoonful, frequently repeated, it amounts to more than is supposed. The barber also speaks of a house which Master Jan occupied⁵ as being too small for him; he hath a wife, a servant and child or children also. If he hire, as he says, at the expense of the city he shall be obliged to show a paper to that effect." (13)

Dissatisfied with the troublous state of affairs in the settlement, barber Rasenburgh and several others removed with their families to Maryland early in 1662. He had been a valued member of the small group along the Delaware, and was called, at times, to assist d'Hinojossa in the administration of the colony, and his loss was acutely felt. Two years later he was in New Amsterdam having difficulty again in the collection of his medical fees, as the following court record affirms:

Lysbert Coutrie, pltf. v/s William Rasenburgh, deft. Pltf. demands from the deft. eighty-five guilders in seawant according to a/c. deft. admits the debt; then says he cured the pltf's leg and agreed with her that she should deduct forty guilders, and that he should pay her the remaining forty-five guilders, which he offered. Pltf. denies being in defts. debt; has settled with him. Deft. offers to declare so on oath. Pltf. says if defendant will declare on oath, she will strike off the forty guilders; which the deft. undertaking, he has done so at the hands of the officer. Burgomasters and schepens therefore decrees that the pltf. shall let the forty guilders in question be to the defts. credit and stand for payment on a/c. (14)

On the fifth of September, 1664, the people of New Netherland were alarmed by the threatening English and sent a remonstrance to the director general and the council at New Amsterdam. Among the signatures, we find that of Willem Rasenburgh.

Influenza and pneumonia played havoc with the settlers during the fall of 1658. At this

³ Jan Oosten, probably.

⁴ Probably Rasenburgh.

⁵ This refers to the preceding barber, Jan Costing.

time, and the year following, the first epidemic of cynanche trachealis is recorded by Webster and it seems the colonials along the Delaware were not spared. This may account for the fact that illness at this time was especially fatal to the children. In October Vice-director Alrichs wrote from New Amstel:

"But few old people die, but a great number of young children, who could not stand it. Six of us fell sick. The members of the council, Hinojosa and Rynvelt, with the sheriff and all the schepens, had a very severe attack and the greatest part remain yet bedridden, but I hope they may ere long recover, as the sickness now begins somewhat to abate."

During the fall and winter of 1658-59 the continued sickness prevailing everywhere throughout the province obstructed the progress of the settlers so that all labor in the field and other undertakings had to be abandoned. The summer of 1659 was bad, too, so that the Vice-director had to report that nearly the tenth part of the people lingered and lived in misery, under continual sickness, fevers and languors. Fully more than 100 persons perished in consequence and a great many cattle were lost. In the fall the agues superseded the lingering diseases of the summer, the neighbors at New Netherlands being equally afflicted, and in desperation the people decided to appeal for supernatural aid. Accordingly, on the 10th of October, 1659, the following order, designating a day of general fasting and prayer, was delivered to Dominie Wellius:

Considering that the righteous God hath visited many and divers inhabitants of this province not only this summer, with painful and long lingering sickness, but moreover, also, that His kindled anger and uplifted hand threatened with many and divers punishments—unless we turn to Him (whom, in our iniquities we have abandoned) in sincere humility and true contrition of heart that He may turn aside His wrath from us, and assist and bless us with His favor, therefore we have considered it most necessary, to that end to proclaim Wednesday, the 15th of October of the current year a day of universal fasting and prayer.—signed P. Stuyvesant. (15)

Such humble wordy prayers and therapeutic fast days were not infrequently resorted to by the Dutch as well as by the contemporary English Colonists on the Atlantic Coast. Reporting to his commissioners in Holland, Alrichs wrote as follows, leaving no doubt as to the prevalence of malaria and scurvy:

"Unhealthiness, sickness, disease, violent and pestilential fevers and other tedious disorders

which have continued every year, whereof many have died. The proclamations of days of fasting and prayer on this account, observed from time to time, and the lists of the dead also sent over, are proofs thereof. All the inhabitants of New Netherlands are visited with those plagues, but none so heavily as our people, which also, nevertheless, continue for at present those here are still for the most part tormented as I myself have been; I am now confined to my bed between two and three months and so severely attacked with tertian ague, that nothing less than death has been expected every other day, and all things were directed accordingly; but now thank God, I begin somewhat to be better, so that at present I begin again to leave the bed for a little while, which inconveniences have consequently been productive of more trouble to us than to other old inhabitants, who apparently have been better able to withstand a bad time.—

Previous letters had promised the sending of assistance of servants, and the last a ship with divers stores—which we have anxiously expected, as well as refreshments for the common people; viz., prunes, currants, French wine, etc., as 'tis impossible in this vexatious sickness to live without them." (16)

The following winter (December 1659) Alrichs wrote:

"The Rev. Wellius was yesterday buried. He died on the 10th day of his illness. I, too, was last Monday night attacked by an ardent fever; my breast became suddenly oppressed with violent pains in the side, so that I appeared in a very forlorn situation. I discharged during these days and nights, nothing but bloody flux, by a copious discharge so that the sight of it created a great alarm which debilitated me so much that I can scarcely go alone with great difficulty." (17)

This dysentery in December might well have been typhoid fever.

With so much illness rampant, surgeon Willem van Rasenburgh was in great demand and since the Dutch officials were at odds with the Swedes, they did not care to employ the Swedish physician, Timon Stidden. Accordingly Jacob De Commer was sent as surgeon when Beekman applied to his superiors on the North River for medical relief in the following letter to Stuyvesant, dated Alteno April 6, 1660:

"Mr. Tymen has spoken to me at different times and made others also speak to me about his appointment as surgeon here in the service of the company. I referred him from time to time to your honor. We require here, under correction, a surgeon, for it has happened already several times, that Mr. William, the City's surgeon, was much needed, but that he could not come here, having some patients there and coming here that he would not have such medications with him as the patients required, causing thereby delay to the sick." (18)

Samuel Hazard (*Annals of Penna.* p. 308) and practically all subsequent local historians,

name Peter Tyneman as having been a surgeon to the settlements along the Delaware in 1660. This is a mistake which has been continued by endless repetition and at this point, thanks to the kindness of Mr. A. J. F. Van Laer, Archivist at the State Department of Education, Albany, New York, it is now possible to state unequivocally that this mythical gentleman was none other than the selfsame Tymen Stidden so often encountered in these annals. Looking up the original letter in question, Mr. Van Laer writes, in part, as follows:

"The letter of William Beekman to Stuyvesant dated April 6, 1660, which is quoted by Hazard, is in N. Y. Col. Mss., vol. 18, p. 83. A translation of it by Berthold Fernow is in Doc. Rel. to Col. Hist. N. Y., Vol. 12, p. 300-302. In it the name of the surgeon is given, not as 'Peter Tyneman,' but as 'Mr. Tymen.' I have looked up the original letter and find that Mr. Fernow's translation is correct. The Dutch text has Mr. Tymen, in which Mr. stands for *Meester*, meaning *heeler*, or surgeon.

I also noticed that the name of the man who applied for a patent is Pieter Mayer, not Peter Moyer, as in Hazard."

The same correspondent, Mr. Van Laer, has also corrected two other discrepancies which have crept into the historical records. Joseph M. Toner, in his noteworthy "Contributions to the Annals of Medical Progress and Medical Education in the United States," published by the Government Printing Office at Washington, D. C., in 1874, on page 39, mentions Michiel de Marco Chertz (or Chertser) as surgeon and Dr. Jacob von Belcamp as druggist at New Amstel. Of these individuals Van Laer in a personal communication wrote as follows:

"This name (de Marco Chertz) occurs in Docs. Rel. to Hist. N. Y., Vol. 2, p. 191, in an account of supplies sent by the city of Amsterdam to the city's Colony of New Amstel, on the Delaware, as Michiel de Marco Chertser, surgeon. It is evident, however, from the nature of the account, that he was not a surgeon on the Delaware, but at Amsterdam, Holland. The amount paid to him was for a chest of instruments, sent to Surgeon de Commer.

The same is true of Jacob van Belcamp, druggist, whose name appears in the same account on P. 193 of Vol. 2 of the above mentioned Colonial Documents and who therefore was also a resident of Amsterdam. His name is also mentioned in the *Correspondence of Jeremias van Rensselaer*, p. 75 and 351, published by this department in 1932."

Jacob de Commer as early as 1600, or earlier, was the company surgeon of New Amsterdam but subsequently removed to New

Amstel, on the Delaware. (19) Tymen Stidden tried hard to get the appointment as surgeon on the Delaware in the service of the Dutch company, but apparently due to the enmity of d'Hinojossa, de Commer was preferred for the situation. When, in the summer of 1662, a soldier was shot in a drunken brawl, de Commer, as colony surgeon, was called upon to dress the wound and witnessed the ante-mortem statement of the victim. Later we find him testifying at the trial of the murderer where the youthful surgeon declared his own age to be about 27 years. When he left the settlement at South River in 1663, he recommended Timon Stidden to fill his place, but d'Hinojossa, the director, rejected Stidden on the grounds that he was a friend of Beekman's.

In 1661 the public service among the Dutch included one director, commissary, cooper, smith, surgeon, and comforter of the sick who was also to act as schoolmaster. Evert Pietersen was this comforter of the sick. He came to the colony with Alrich in April 1657 and was the first schoolmaster on the Delaware. The pedagogue was expected to supplement the preacher in many of his duties and the duty of consoling the sick devolved equally upon domine and schoolmaster, from which the latter earned the title of "Zieckentroster." While his status as a man of extended reading gave him some knowledge of medicines and their applications, he was expected rather to read and pray with the sick, an office considered more important than the temporal ministrations of the barber-surgeons.

Evert Pietersen, when he came over on the Gilded Beaver, had a fixed salary of 36 guilders per month and 125 guilders annually for his board. His first school at Fort Casimir had an attendance of twenty-five children, nearly all Swedes. Shortly after 1661 he replaced the schoolmaster at New Amsterdam, where he continued in office after the English occupation. He was married when he came to this country, but later lost his wife, and following the precedent of his profession, married a widow and became one of the most substantial citizens of New York. (20)

In a letter written in 1662 by Vice-director Beekman to Stuyvesant, "An old man" is

mentioned to have been murdered by the Indians and examined by Timon Stidden, the surgeon. Dr. Stidden, at this time resided at Upland (now Chester, Pa.). There he testified against an unruly Finn, telling unpleasant experiences of the man and declaring that "he had neither security nor peace, but was obliged to leave Upland's Kil because of the ruffian." The whole testimony sheds some light on the peculiar difficulties of early medical practice, as well as a picture of one precarious mode of transportation the doctor used to reach some of his scattered patients. In part it reads as follows:

"Mr. Tymen Stidden complains that when he was summoned by Jacob Swenson to bleed him and went there in his canoe, Evert the Finn saluted him so with stones, on leaving the Upland's Kil that he was in danger in his canoe at least of being wounded, he managed finally to get out of the kil, however, but was thoroughly drenched by the splashing of the stones from the bank, without knowing the reason why." (21)

Leaving Upland, Stidden settled permanently at Christina, became an extensive landowner, purchasing much of the ground now occupied by the city of Wilmington. His title to this land was later confirmed by Colonel Lovelace, Governor General of this territory after the English occupation. The grant to Stidden is dated Fort James, in New York, the old Fort Amsterdam, the 23rd May, 1671 and is quoted by Benjamin Ferris in his "History of the Original Settlements on the Delaware."⁶

Timon Stidden died in the spring of 1686; for more than 30 years he was one of the active pioneers resident in this region. The doctor was twice married, had several children and numerous descendants. One of his posterity preserved the metal case (now unfortunately lost) in which he carried his surgical instruments on visits to his patients of the early Swedish colony, interestingly authenticated by bearing the name and title engraved upon it. (22) Another descendant, Colonel George A. Elliott, now president of the Historical Society of Delaware, owns an interesting and rare copy of an old English herbal believed to have once belonged to Stidden. Through the kind courtesy of the owner, I am enabled to reproduce the title page, the last

page of "The Booke of the Seynge of Waters" (included in the same volume) and the colophon at the back of the volume. In Dibdin's *Typographical Antiquities* (London, 1819, Vol. 3, p. 133) it is listed by Joseph Ames under a bibliography of William Copland's books as "No. 884—The Properties of Herbes, 1552, Octavo," as having been described by Herbert from an imperfect copy. William Copland was an early English printer, working at some time in the printing shop of the famous Wynkin de Worde, who in turn was the successor, I believe, of Caxton. Eleanor Sinclair Rohde, in "The Old English Herbals" (London, 1922) mentions two other editions of this Bancke's herbal from Copland's press and then in a footnote says that no known copy of this one printed for Richard Kele is known to exist. It may be, then, that this intriguing medical work, probably often consulted by Stidden 250 years ago, is now unique.

The burden of the care of the sick usually fell upon the sturdy women of the settlements and many acquired fame for their remedies. Cobb's Creek was once called Amas-land Creek and the land round about was designated Amesland or "Country of the Nurse" by the Swedes because a nurse had formerly lived there. Amas-land was also known as Carkoens, a corruption of the Indian name for the creek, "Kakarikonk or Karakung." Near the site of the Blue Bell Tavern was erected the first water mill in Pennsylvania where the Darby Road (now Woodland Avenue), the oldest highway in Pennsylvania, crosses Cobb's Creek, and the holes sunk into the rock in which the posts that supported the framework of the mill were placed are still to be seen.

Nearby, the first insane asylum (if I may call it such) was built in 1678, as noted in the following records: (22a)

"Jan Cornelissen, of Amesland, complains to the Court, that his son Erick is bereft of his natural senses, and is turned right mad, and that he, being a poor man, is not able to maintain him. Ordered: that three or four persons be hired to build a little block house at Amesland, to put him in, and at next court an order will be taken that a small levy be laid for building the house and maintaining the madman according to the laws of the government."

There was a provision in the Duke's Laws as to the conditions of distracted persons

⁶ Wilmington, 1846, p. 193.

which directed the mode in which the charge for their support was to be levied.

Little is known of the exact nature of the diseases which afflicted the early settlers. Agues, fevers, apoplexies, burns, scalds, wounds and broken bones, scrofula and the King's evil, pleurisies and pneumonia, consumption, scurvy, quinsies, scarlet fever and cynanche, dysentery, typhus and typhoid, small pox, yellow fever, measles, worms, and the difficulties incidental to childbirth were only some of the disorders with which the early barber-surgeons had to contend. The records of the times are not often clear as to just what ailment prevailed. At times the effects of famine and want were frightful and the poor protection against the inclemencies of the weather often led to pneumonia in the winter and sunstroke in the hot summer. As a rule the barber-surgeons, being in the guild class, were fairly well recompensed when contingencies permitted, but in a communication of Alrichs to Stuyvesant, there is mentioned one at New Amstel who was apparently in straitened circumstances. October 29, 1657, the director wrote: "Surgeon Ludekens is also here with his wife, who say, they have friends at the Manhattans, to pay the expenses and clothing, since they are bare and deprived of everything. If it is so, that there is anything to be expected from there, I would like your honor would please give information of it by letter." (23) Evidently the man was a fraud, for five months later Alrichs again mentioned

"a certain David Ludekens, whom with his wife, they being naked and needy, I have again fitted out and helped with garments; he afterwards ran away from here stealthily, without paying anything and I have received a letter from him from the Manhattans, where he is living somewhere, he promises at least to pay a part of it—in the interests of the city I request that he be directly arrested and sent to the Hon. Governor of Virginia by first chance, in order to satisfy his Honor." (23A)

These barbers were probably well versed in the medical knowledge of the seventeenth century. This was the era of the famous Dutch universities at their prime. At Leyden were Sylvius, Ruysch and Bidloo; at the Hague, Van Deventer and Solingen; Swammerdam at Amsterdam, where also, Nicholas Tulp was the celebrated regent and physician. When, on September 7, 1657, the Commissioners of

the Colony in New Netherlands applied to the city of Amsterdam for funds to send another ship hither, Messrs. Tulp, et al. were "commissioned and requested to consider and examine the said matters maturely and to report their conclusions and opinion accordingly."

(24) Their mature deliberation led to an unfavorable report and the application for funds was denied.

Van Helmont's mystical opinions were not unknown even to the laity. Two Dutch Labadists in 1679 stated that at a home in Burlington, New Jersey, they saw a copy of Van Helmont's medicine lying on the window just as if it had been a commonplace book. (25) Alchemy greatly influenced medical practice of the period, and the "weapon salve" of Sir Kenelm Digby, known to Winthrop in New England, was in all likelihood not unknown to the inhabitants of New Sweden. When the small pox broke out among the Indians the Vice-director at New Amstel wrote to New Amsterdam:

"I earnestly solicit that I may receive, by first opportunity, at my expense, what theriacal, mythridat senna leaves, and other purgatives and cooling remedies as are of service in that sickness, as no medicines are obtainable here." (26)

Simples abounded and the use of many native herbs was learned from the Indians, the women of the province becoming especially adept in the concoction of these harmless, but satisfying remedies. Kalm, in his "Travels," stated: "An old Swede remembered that his mother cured many people of a dropsy by a decoction of the root of the sassafras in water (drank every morning) but she used at the same time to cup the patient on his feet." (27)

The use of various baths, common among the Scandinavians, was resorted to for hygienic reasons with great regularity. Kalm (28) learned from an old Swede that before the coming of the English, almost all the Swedes made use of the baths, and they commonly bathed every Saturday. A steam bath was erected on Tinicum Island by the colonists soon after the arrival of Governor Printz.

Venesection was of course the universal recourse of the barbers; and cupping, tooth drawing, the application of setons, bone setting and the treatment of wounds comprised the routine work of the day. Uroscopy, a fea-

ture of nearly all the contemporaneous Dutch works of art depicting the doctor of that day and age, was surely cultivated assiduously and stressed in diagnosis and prognosis. The good Heelmeester Timon would no doubt often resort to his "Booke of Seynge of Waters" to clear up the import of a puzzling bottle.

The belief in witchcraft was prevalent and superstitions played a large part in the life of the settlers. Amandus Johnson mentions the belief that bleeding is stopped by grasping around the sore with the hand and repeating the formula. "Thou shalt stand as firm as Jordan stood, when John baptized in the name of the Father, of the Son, and of the Holy Ghost." In times of great stress the ravages of disease were considered supernatural visitations in retribution for sin and proclamations of days of fast and prayer were often resorted to in order to placate angry Deity and thus end pestilence.

It is unfortunate that no direct writings have come down to us from the quills of these pioneer medical men. There was no printing press among them and so far as I can discover, none ever took any apprentice to continue the art among the settlers on the Delaware. Few of these doctors tarried very long; some died here, and others for the most part, departed when the term of service was done.

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OLD DELAWARE FEE BILLS— A BIT OF HISTORY

W. EDWIN BIRD, M. D.,*
Wilmington, Del.

With one of the crying needs of the day a better understanding of the problems that are generally encompassed under the broad heading of "medical economics," it is of more than passing interest to know what the medical profession usually charged in days gone by for certain services. As a small contribution to this subject, we reproduce in this issue of THE JOURNAL two Fee Bills, now the property of the library of the Delaware Academy of Medicine.

The first Fee Bill is that of the Kent County Medical Society and was donated by the Society to the Academy a couple of years ago. It was adopted by the thirty physicians who then composed its membership on August 2, 1854, and they had the good sense to make it unanimous and to append their names thereto, pledging their professional honor to conform to the schedules. We have no record of any trials or dismissals for failure to conform, so it may be assumed that both profession and public found the charges fair for the times. The Bill is, of course, that of the general practitioner, for this was before the day of the specialist, yet many operations were included that no general practitioner of today would attempt. It was also before the hey-day of the medical school in this country, hence the interesting items concerning the student fees for the "course of reading"—a one-man university that turned out an amazing number

(Continued on Page 229)

*Editor, Delaware State Medical Journal.

FEE BILL

ADOPTED BY THE

KENT COUNTY MEDICAL SOCIETY,

AUGUST 2, 1854.

Primary Visit in Town, - - -	\$1.00
Each succeeding Visit in Town, - - -	.50
Visit in Country, not exceeding two miles, 1.00	
" " each additional mile, .25 to .50	
Visit at night, or in storms, double the above rates.	
Primary, Consultation Visit, in addition to the fee for an ordinary visit, - - -	\$5.00
Succeeding consultation visit, do. do. \$1 to 2.00	
Detention at patient's house, (per hour), .50 to 1.00	
" " all night, - - -	\$5 to 10.00
Verbal Advice, at physician's house, .50 to 1.00	
Written " " - - -	\$1 to 5.00

Rising at night, without going out, - - -	\$1.00
Attendance upon a case of natural labor, when not detained more than six hours, in addition to the fee for visit, - - -	\$5 to 8.00
Do. do.—When detained more than six hours, each additional hour, - - -	.50 to 1.00
Attendance upon a case of preterm labor, - - - - -	\$10 to 20.00
" " —Instrumental labor, - - -	15 to 30.00
Delivery of placenta, - - - - -	5.00
In Obstetric cases, all subsequent visits to be charged for.	

IN ALL CASES, ALL SERVICES RENDERED AND MEDICINES GIVEN, TO BE CHARGED FOR, IN ADDITION TO THE VISIT, ACCORDING TO THE FOLLOWING:

Venesection, Ext. Teeth, and Sealing Gums, - - -	.50	Reduction of Luxations, - - -	5 to 10.00
Opening small Abscess and Cupping, (each cup), - - -	.50	" and Dressing of Fractures, - - -	10 to 20.00
" large " and Vaccination, - - -	\$1.00	Operation for Fistula in Ano or Lachrymal, - - -	20.00
" Mammary Abscess and applying dressing, - - -	2.00	" Hare Lip, - - -	15 to 25.00
Administering Emetics, - - -	1.00	" Strabismus and Clubfoot, - - -	25.00
Introducing Seton, Sutures and Issues, - - -	\$2 to 5.00	" Aneurism, - - -	50 to 100.00
Primary Introduction of Catheter, - - -	.300	" Cancerous Mammas, - - -	30 to 50.00
Subsequent " - - -	1.00	" Hernia, - - -	40 to 75.00
Primary Introduction of Speculum Uteri or Recti, - - -	5.00	Reduction of Hernia by Taxus, - - -	5 to 10.00
Subsequent " - - -	2.00	Amputation of Thigh, Leg, Arm or Forearm, - - -	30 to 50.00
Excising Cyels, Tonals, Extricating Hemorrhoidal Tumors and Amputating Fingers or Toes, - - -	5.00	Excision of Testicles, - - -	25.00
Dressing Wounds—according to their magnitude, - - -	1 to 10.00	Trephining, - - -	25 to 75.00
Excision of small Tumors, - - -	5.00	Extracting Cataract, - - -	30.00
" large " - - -	10 to 20.00	Couching " - - -	30.00
Paracentesis Abdominis or Thoracis, - - -	10.00	Tracheotomy, - - -	25.00
Ext. Polypus from Nose, - - -	10 to 20.00	Gomorrhoea, - - -	10 to 30.00
		Syphilis, - - -	40 to 50.00

MEDICINES:

Emetic or Cathartic, - - -	25 cts.	Epispastics, - - -	25 to 100 cts.
Aperient or Cathartic Pills, (each) - - -	4 to 10	Linctures or Emulsions, per oz. - - -	25 to 50
Powders, - - -	4 to 10	Mercurial Ointment, " - - -	50
Single Anodyne, - - -	25	Ordinary " - - -	25
Aqueous Mixtures, per oz. - - -	12 1/2	Peruvian Bark, " - - -	50
Tinctures and Elixirs, per oz. - - -	25 to 50	Quinine, per gr. - - -	4 to 10

FEE FROM A STUDENT, for the whole course of reading, (three years.) - - -	\$200.00
" " (for one year.) - - -	100.00

We, the undersigned, Members of the Kent County Medical Society, unanimously adopt the above Fee Bill, this 2d day of August, 1854, and pledge our professional honor to conform to our charges, from this date, to its provisions.

WM. BURTON
THOS. CAMPBELL
ROBT. H. CLARK
H. C. COMEY'S
R. S. CUMBERETH
WM. CUMMINS
C. A. COWGILL
ED. D. DAILEY
W. M. DANIEL
EZRAEL DAWSON.

VINCENT EMERSON.
SAM. W. FISHER.
JOSEPH ADDISON GOODWIN.
THOS. D. HUBBARD.
W. AITMAN JONES.
ISAAC JUMP.
MARK G. LAFLAND.
JAMES R. MITCHELL.
JOHN R. MOORE.
WM. W. MORRIS.

A. H. SANDORN
JOVE SAULSEY.
JOHN W. SHARP.
JOSEPH SIMPSON.
WM. W. STUART.
LUTHER SWIGGETT.
WM. MCK. TAYLOR.
JAMES H. THOMAS.
ALBERT WHITELEY.
H. FISHER WILLIS.

FEE BILL

ADOPTED BY THE

MEDICAL ASSOCIATION OF WILMINGTON, DEL.

Fee from a medical student for the whole course of reading three years, - - - - - \$200 00
 Fee from a medical student for one year's reading, - - - - - 100 00
 do do do for each subsequent year, - - - - - 50 00
 Primary visits in the city, each - - - - - 1 00
 Subsequent visits do do - - - - - 50 to 1 00
 [If more than one member of a family (schools excepted) are attended at the same time, the charge ordinarily will be one half for such case or cases.]

Fee for primary visits in special cases (such as Small Pox, malignant Scarlatina and other similar diseases of a virulent character,) each, - - - - - 2 00 to 5 00
 Subsequent visits do do do each 1 00 to 2 00
 Primary consultation visits, each - - - - - 5 00
 Subsequent consultation visits, each, - - - - - 1 00 to 2 00
 Primary consultation visits, in Surgical and Obstetrical cases, - - - - - 5 00 to 8 00

[In consultation visits at night, the additional sum for night visits shall be added.]

Fee for a written history of a case to a Physician at a distance, - - - - - 5 00 to 10 00
 Visits at night without detention, - - - - - 2 00 to 3 00
 Rising and prescribing at night without going out, 1 00 to 2 00
 Primary advice at Physician's house during the day, 50 to 5 00
 Subsequent advice do do do do 50 to 1 00
 Visit over 3 and under 5 miles - - - - - 2 00 to 3 00
 Each additional mile, - - - - - 50 to 1 00
 Visit under 3 miles, - - - - - 1 00 to 2 00
 Visits to the country, made after dark and up to 10 o'clock P. M., under 3 miles, shall be, - - - - - 2 00 to 3 00
 Visits to the country made after dark, and up to 10 o'clock, P. M., over 3 and under 6 miles, 3 00 to 6 00
 For each additional mile over 6 - - - - - 1 00
 Visit and attendance all night, - - - - - 5 00
 do do at night when detained, for each hour, 1 00
 This charge will not exceed \$5 for a night, and is not applicable to Obstetrical cases.]

OBSTETRICS.

Fee for cases of natural labor when not detained more than 12 hours, and subsequent attendance not exceeding 4 days, - - - - - \$6 00 to 12 00
 For preternatural labor, or when detained more than 12 hours, - - - - - 10 00 to 20 00
 Instrumental labor (forceps) - - - - - 12 00 to 20 00
 do do (crochet or removal of limb) 20 00 to 30 00
 Medical attendance on lying-in women, not exceeding four days, when the child and placenta have been delivered, (in town) - - - - - 5 00
 Delivery of placenta alone, - - - - - 5 00 to 12 00

OPERATIONS.

Fee for Lithotomy, - - - - - \$50 00 to 100 00
 Lithotripsy, - - - - - 50 00 to 100 00
 Extracting cataract, - - - - - 30 00 to 50 00
 Couching, - - - - - 20 00 to 30 00
 Hernia, by operation, - - - - - 30 00 to 50 00
 do by Taxis, - - - - - 5 00 to 10 00
 Extirpation of testicle, - - - - - 20 00 to 30 00
 Paracentesis thoracis, - - - - - 20 00

Fee for Paracentesis abdominis, primary operation, 10 00
 subsequent, - - - - - 5 00
 Fistula in ano, - - - - - 15 00 to 25 00
 Operation for hair lip, - - - - - 10 00 to 20 00
 Extirpation of large Wens, - - - - - 10 00 to 20 00
 small do - - - - - 5 00 to 10 00
 Removal parotid gland, - - - - - 50 00 to 100 00
 Amputation at the shoulder or hip joint, 50 00 to 100 00
 do thigh or leg, - - - - - 30 00 to 50 00
 do arm or fore arm, - - - - - 20 00 to 40 00
 do fingers and toes, each, 5 00
 Reduction and dressing simple Fracture, 6 00 to 12 00
 do do compound fracture, 12 00 to 20 00
 do do luxation of large joints, 10 00 to 30 00
 do do small do 5 00 to 10 00
 Re-dressing fractures, luxations and wounds in addition to the fee for visit, 50 to 1 00
 Trephining, - - - - - 20 00 to 30 00
 Division of tendons and muscles in deformity, each 5 00 to 20 00
 Aneurism of large vessels, - - - - - 30 00 to 50 00
 do by anastomosis, - - - - - 30 00 to 50 00
 do of small vessels, - - - - - 10 00 to 30 00
 Operation for hydrocele, - - - - - 5 00 to 15 00
 Extracting polypus from nose, - - - - - 5 00 to 15 00
 do cancerous mamma, - - - - - 30 00 to 50 00
 Operation for fistula lachrymalis, - - - - - 10 00 to 20 00
 do for artificial joints the same charge as for amputation of similar bones, - - - - - 50 00 to 100 00
 do for fungus in antrum, - - - - - 5 00 to 20 00
 do for necrosis, - - - - - 5 00 to 20 00
 Dressing simple incised and lacerated wounds without sutures - - - - - 2 00 to 5 00
 Dressing wounds, when arteries are taken up 5 00 to 10 00
 Extirpating hemorrhoidal tumors, enlarged tonsils, operation for varicose veins, cutting off uvula, &c. &c. - - - - - 3 00 to 10 00
 Tracheotomy, - - - - - 10 00 to 20 00
 Introducing catheter, first time, - - - - - 3 00 to 5 00
 do do subsequently, - - - - - 1 00 to 3 00
 do setons and issues, - - - - - 1 00 to 5 00
 Venesection or scarifying gums, or extracting teeth, - - - - - 1 00 to 3 00
 Dividing frenum linguae, - - - - - 1 00 to 3 00
 Opening abscess, - - - - - 1 00 to 2 00
 Scarifying eyes, - - - - - 1 00 to 2 00

[These charges affixed to minor operations are to be additional to the customary fee for visit.]

Fee for syphilis, - - - - - 10 00 to 50 00
 Gonorrhoea, - - - - - 5 00 to 10 00
 Subsequent advice at physician's house in syphilis or gonorrhoea, each time, - - - - - 1 00 to 2 00
 Vaccination, - - - - - 2 00 to 3 00
 Re-vaccination in a single case, - - - - - 1 00 to 2 00
 do where more than one occasion, same family, for each case beyond the first - - - - - 1 00 to 2 00

When in cases of re-vaccination, disease pursues its regular course

Legal post mortem examination

[In surgical cases, and whenever subsequent attendance is required in obstetrical cases, in consequence of acute disease, the rate of charges shall be the same as in medical cases.]

OLD DELAWARE FEE BILLS — A BIT OF HISTORY

(Continued from Page 226)

of excellent practitioners, though these gentlemen rarely acquired the prestige that clung to the graduates of the formal medical schools, of which the country at that time boasted a bare dozen.

NEW CASTLE COUNTY MEDICAL SOCIETY

— FEES —

OFFICE VISITS - - - \$1.00 and up

HOME CALLS

First Visits

7 A. M. to 5 P. M. \$3.00

5 P. M. to 9 P. M. \$4.00

9 P. M. to 7 A. M. \$5.00

Subsequent Visits

7 A. M. to 5 P. M. \$2.00

5 P. M. to 9 P. M. \$3.00

9 P. M. to 7 A. M. \$5.00

CONFINEMENT CASES - - - \$35.00

EXTRA CHARGES

Additional Members of the Family

Treated at Home—\$1.00 and up

Country Calls - - - Fee plus mileage

Nov. 19, 1929

Historically the Bill outlines those procedures that were most commonly encountered in a general practice, and they do this more conclusively than did the textbooks of that day on medicine, surgery, or obstetrics, for these texts give scant idea of the frequency of the lesions described. The most interesting item in the Kent Bill is "couching," a term that the present day general practitioner is totally unfamiliar with. The ophthalmologist may recognize it as the dislocating of the optical lens, an inferior operation that was resorted to when it was not feasible to totally extract the cataract. The present-day texts on ophthalmology do not mention it.

The second Fee Bill is that of the Medical Association of Wilmington, which was recently presented to the Academy by Mr. Arthur

L. Bailey, librarian of the Wilmington Institute Free Library. Mr. Bailey has no data as to how or when it found its way into his library. His generosity in donating it to the Academy is much appreciated.

Here again we find a list of the commoner procedures, somewhat lengthier than that of the Kent Bill, but this would be expected in the metropolis of the state—an urban population would require a fuller schedule than would a rural one. We find also that medicines are not included, since the city boasted a few apothecary shops. But we do find again "couching," and student fees—evidently the University of Pennsylvania had serious competition in the Delaware metropolis.

The Wilmington bill is not dated, yet we believe it antedates the Kent Bill, and for the following reasons: First, a fee schedule is more likely to originate in a metropolitan area than in a rural one. Second, the pioneer Bill in this state, which this one probably is, could very well be undated—they simply did not think of that. Third, the Bill does not contain the names of the members: that idea probably came later. Fourth, the operation for hare lip is spelled "hair," and was corrected when the Kent Bill was printed later. Finally, it does not contain the imprint of the printer.

The city schedule is slightly lower than the county one in several important items. This might have been due to the increased competition in the larger community.

The uncertainty of the date of the Wilmington Fee Bill is unfortunate, but even more so is the loss of the records of the original medical society in Wilmington or New Castle county. The present county society was organized in Wilmington in 1901, but there was a previous organization in the city and county for many years before that, which seemed to lose its vitality about 1895 and passed into a state of innocuous desuetude. It is possible, even probable, that the prior organization was the one whose Fee Bill we now have.

The Sussex County Medical Society was organized at Georgetown on December 15, 1863, and we find that the Kent County Medical Society was so mature as to need a Fee Bill in 1854. What we wish now is more data on the founding of the societies in New Castle

and Kent Counties, and if any of our readers can shed any light on this subject we shall appreciate it very much.

Contrasting the uncertainty of our county records with the clarity of our state records, we find that the Medical Society of Delaware was incorporated by a special Act of the General Assembly on February 3, 1789, thus making it the third oldest medical society in the United States, being antedated only by the Massachusetts and New Jersey Societies; also making it the second to be incorporated, yielding priority only to the Massachusetts Society.

Also by way of contrast, we reprint a recent (1929) fee schedule of the New Castle County Medical Society, which is conspicuous for its brevity, and if it be true that brevity is the soul of wit, this schedule ought to be very funny. As a matter of fact it is—it represents a slight upping of the previously prevailing charges, but it is dated November 19, 1929, just three weeks after the financial collapse of October, 1929. Imagine raising the prices in the face of a money panic! Yet the funnier aspect is that nobody at that time thought it was a panic, or the beginning of a prolonged depression—the diagnosis was missed completely. As the result of the dislocated times, this schedule is somewhat out of joint and has not been adhered to strictly. Even if it were, a comparison with that of the earlier Wilmington Fee Bill shows that, in the eighty or ninety-year interval, the cost of medical care has risen less than that of any other necessary commodity which the public has to buy, believe it or not.

WOMAN'S AUXILIARY: A. M. A.

To the Members of the Auxiliary:

By the time this first issue of the 1936-37 News Letter is published the presidents of state and county Auxiliary groups will have received letters outlining the objectives of this administration. Our aims are simple and our ways of accomplishing them should be direct and simple as well. The Auxiliary is free of politics and red tape—let us strive to keep it so. Our name tells a great deal—Webster defines the word Auxiliary, when used as a noun, as "one that aids or helps." When the word is

used as an adjective some of the synonyms may seem less flattering for there we find "subservient" and "subordinate" but when we consider that as members of this organization we are willingly subservient and subordinate it is quite a different matter. Now we may be proud that if we cannot be members of the parent body we can at least aid it and place ourselves under its direction.

There are often times when certain individuals within our ranks feel that we should be less dependent. Careful consideration of the aims and objects of our organization as they are set forth in our Constitution shows us the fallacy of this. If anyone feels that the Auxiliary should be entirely independent and act freely without considering the wishes of the greater body, that person has no place in the Auxiliary for by its very name our organization declares itself as a group secondary to a larger one.

During the coming year when a great deal of legislation directly or indirectly concerned with the medical profession will be brought before the public, we can show how clearly we understand our role as "Helpers" by becoming a reserve force acting in the best interests of the doctors. We can accomplish a great deal by following the course laid out for us, by passing on to lay groups the viewpoint of the medical profession, by educating ourselves and others along health lines, and what may be harder for us than the other tasks, by remaining mute and quiescent until we are requested by our medical societies and our advisory councils to become active.

I realize only too clearly that this attitude may be considered mid-Victorian by many readers. Perhaps it is so but many things mid-Victorian have not been bettered and this honest acceptance of a fact that has both biological and sociological bases for truth does not seem to me to be anything shameful. To admit our limitations freely and to make the most of those privileges which are ours often results in greater accomplishment than comes from wasting strength chafing at immovable barriers.

MRS. ROBERT E. FITZGERALD,
Wauwatosa, Wis. President.

EDITORIAL

DELAWARE STATE MEDICAL JOURNAL

Owned and published by the Medical Society of Delaware. Issued about the twentieth of each month under the supervision of the Publication Committee.

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Local news of possible interest to the medical profession, notes on removals, changes in address, births, deaths and weddings will be gratefully received.

All advertisements are received subject to the approval of the Council on Pharmacy and Chemistry of the American Medical Association.

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VOL. VIII NOVEMBER, 1936 No. 11

MEDICAL HISTORY—A NEGLECTED STEP-CHILD

This issue of THE JOURNAL is devoted largely to local medical history—the story of the first physicians who practiced along the shores of the first of the two rivers discovered by Henry Hudson, i. e., the South or Delaware River, whose medical and secular history is interwoven with that of the later discovered North or Hudson River. Our leading story is by Dr. Samuel X. Radbill, of Philadelphia, and is reprinted from the November issue of the *Bulletin of the Institute of the History of Medicine* of the Johns Hopkins University, with the generous consent of the Director of the Institute, Dr. Henry E. Sigerist. The immediate reprinting of a current article is something no small magazine can indulge in very often, yet we are glad to do so this time in order to bring this excellently worked-up

material more generally to the attention of the Delaware profession.

We are happy to state that some of the most valuable portions of this material were found here in Delaware. The first, and main, hero of the tale is Tymen Stidden—a good old Delaware name that persists today as Stidham, of whom there are now three in the Wilmington telephone directory, though none of these is an M. D.

The other article, written by the editor, relates to two old medical fee schedules, one of the Kent County Medical Society, dated 1854, and the other of the old Medical Association of Wilmington, and which unfortunately is not dated. Why do individuals and organizations fail to keep proper records of their doings—and misdoings? The writing of biography and history is one of the most important duties of each and every generation, and while Delawareans have been exceptionally careful to preserve their genealogical records they have failed notably to preserve the records of their "ancient and honorable" medical societies. Wide gaps exist between the founding of the Medical Society of Delaware in 1789 and its centennial meeting in 1889. If any of our readers can supply us with any of this missing material, or with hints as to where it may be found, we shall be most grateful for the lead and will be glad to follow through. The same thing applies to the earlier history of the medical societies in New Castle and Kent Counties, which are now shrouded in obscurity.

The tercentenary of the landing here of the Swedes will be celebrated in Wilmington in 1938, probably in the joint presence of the President of the United States and the Crown Prince of Sweden. We would be happy indeed were we able to contribute to that occasion an adequate medical history of those early Swedes and their American successors. And when we say "we," we speak impersonally: who will essay the role of historical god-father and place a decent garb upon our neglected step-child?

DELAWARE ACADEMY OF MEDICINE

The pathological conferences will be held again this winter at the Delaware Academy of Medicine. In an attempt to increase interest and attendance at these conferences three changes have been made. We have decreased the number of conferences to five beginning in November and ending in March. Each conference will begin promptly at 9 p. m., and end at 10:30. Drs. Robinson and Miller will again present pathology and radiology, but their time will be limited, and some time will be allotted to our own pathologists and clinicians to present cases of local interest.

These conferences are of interest to practitioners of all branches of medicine and surgery.

The complete program is as follows:

November 6—Diseases of the kidneys.

December 4—Diseases of the gall bladder.

January 8—Carcinoma of the lung.

February 5—Cardio-vascular diseases.

March 5—Diseases of the brain.

All conditions, both medical and surgical, are presented by x-rays and pathological specimens.

You are invited to attend these conferences: your evenings will be well spent.

MISCELLANEOUS

Radio Broadcasts

The American Medical Association and the National Broadcasting Company present the second series of dramatized health broadcasts under the title *Your Health*. The first broadcast in the new series was the thirty-second dramatized cooperative broadcast under the title *Your Health*. The theme for 1936-1937 differs slightly from the topic in the first series, which was "medical emergencies and how they are met." The new series is built around the central idea that "100,000 American physicians in great cities and tiny villages, who are members of the American Medical Association and of county and State medical societies, stand ready, day and night, to serve the American people in sickness and in health."

The program is on the Blue network and Pacific network of the National Broadcasting Company.

It should be noted that a station may take the program, or not. If a local N. B. C. station is not broadcasting the program *Your Health*, it is possible that the management may be induced to broadcast the program if it receives evidences of local interest. The committee on education or other appropriate committee of the local medical society might take this matter up with the station management and tender cooperation in giving the program local publicity.

The topics are announced monthly in advance in *Hygeia*, the *Health Magazine*, and three weeks in advance in each weekly issue of *THE JOURNAL*.

The time of the broadcast is Tuesday afternoon at 5 o'clock eastern standard time (4 o'clock central time, 3 o'clock mountain time, 2 o'clock Pacific time).—*Jour. A. M. A.*, Oct. 17, 1936.

Removing Adhesive Tape

The deaths of two football players at Purdue University and the serious burning of several others as a result of the explosion of gasoline focuses attention on the correct method of removing adhesive tape. From time to time, various recommendations have been made as to the easiest methods of performing this task. Every one knows that it is painful to turn up one edge of the adhesive tape and to jerk it suddenly away from the skin. Furthermore, this will pull out the hair and even remove the skin—and give opportunity for secondary infection. Gasoline has been recommended in the past, as well as ether and various volatile oils. Kerosene has also been employed for removal of adhesive tape from the skin. None of these substances meets the optimal indications. For some time ethyl acetate was advocated, but it has a definite fire hazard and is irritating to the eyes, nose and throat. Carbon tetra-chloride is known as a standard fire extinguisher. It is not inflammable and is frequently used for the removal of tape. It constitutes the chief ingredient of some of the well known cleaning fluids on the market. Recently the Council of Pharmacy and Chemistry has voted to accept two solvent preparations proposed primarily for the removal of adhesive tape from the skin. One of these substances consists of 98 per cent dichloro-

thane and has no fire hazard, since it is non-explosive and non-inflammable. However, it is similar to chloroform in its action and the same precautions are necessary as to its inhalation. The other product is a mixture of approximately 60 per cent carbon tetrachloride and 40 per cent naphtha with a small amount of oil of sassafras. Such a mixture may burn but will not explode under ordinary conditions and in the ordinary sense is considered to be non-inflammable. With any of these preparations there may be some danger associated with the removing of large quantities of tape in small rooms without proper ventilation. This is, however, a minor danger and should not be seriously disturbing. Certainly it is a far less hazard than the use of gasoline anywhere near a source of flame or heat. Coaches and trainers of football teams will do well to equip training quarters with plenty of modern improved solvents so as to eliminate the danger of catastrophe such as that which has thrown a somber atmosphere about the current football season.—*Jour. A. M. A.*, Sept. 26, 1936.

The Nomenclature of "Male Hormones"

The Council of Pharmacy and Chemistry reports that the investigations on the male hormones have advanced to the point at which three chemically pure substances have been obtained from urine and testis tissue; a number of related compounds have been obtained by modifying these substances or by synthetic degradation studies on the sterols and bile acids. The physiologic potencies of the naturally occurring compounds and of some of the other substance have been determined. On the recommendation of the Advisory Committee on the Nomenclature of Endocrine Principles, the Council on Pharmacy and Chemistry adopted the following terms: (a) *Androsterone* to designate the chemically pure hormone $C_{19}H_{30}O_2$, melting point 178 C., obtained from urine (international unit 100 micrograms as assayed by comb growth response in the capon). (b) *Dehydro-androsterone* to designate the chemically pure hormone $C_{19}H_{28}O_2$, melting point 148 C., obtained from urine (capon unit approximately five times the dose of androsterone). (c) *Testosterone* to designate the chemically pure hor-

mone $C_{19}H_{28}O_2$, melting point 154 C., obtained from testis tissue (capon unit from one-tenth to one-sixth the dose of androsterone). (d) *Androgen* to designate substances possessing masculinizing activity. Urinary androgens, testicular androgens or androgenic substances from plant or other sources may or may not contain androsterone, dehydro-androsterone or testosterone. Although the international unit is based on comb growth response in capons, it should be emphasized that this method of assay does not necessarily express the quantitative physiologic activities of different preparations on mammals. Therefore it is highly desirable to determine the physiologic activities of new pure or crude preparations by assays on mammals as well. (*J. A. M. A.*, July 18, 1936, p. 210).

The Nomenclature of Estrus-Producing Compounds

The Council on Pharmacy and Chemistry reports that there are at least seven naturally occurring estrogenic substances that have been isolated in a crystalline condition. As the result of investigations by Butenandt, Cook, Doisy, Marrian and their respective associates the structure of these and related compounds has been definitely established. Two systems of nomenclature have been proposed; one by Girard using the root "folli-" with suffixes to indicate the nature of the compounds; the other by Adam and his collaborators using the root "oestr-" with certain modifications. In view of the importance of Edgar Allen's investigations in opening up the field of the follicular hormone and of Doisy's contributions in isolating the first crystalline estrus-producing compound and the further fact that the Council has approved theelin as a common name, the Advisory Committee on the Nomenclature of Endocrine Principles considered a proposal to retain "theel-" as the root for the names of the estrus-producing compounds. However, in view of the fact that the system of nomenclature devised by Adam and his collaborators has been fairly widely adopted among investigators, it appeared inadvisable to supplant this system even though the new system based on "theel-" was simpler and more nearly in accord with the nomenclature for the androgens.

Accordingly, the Council, on the recommendation of the Advisory Committee on the Nomenclature of Endocrine Principles, decided (1) to adopt the system of nomenclature based on the root *estr-*; (2) to retain *theelin*, *theolol* and *dihydrotheelin* as synonyms for the compounds known in the aforementioned system as *estrone*, *estriol* and *estradiol* respectively; and (3) to adopt the term *estrogenic* to describe those compounds or extracts which in addition to their other physiologic properties produce estrus, and to adopt the noun *estrogen* as the collective term for all the substances having these properties. (*J. A. M. A.*, Oct. 10, 1936, p. 1331).

Papilloma and Carcinoma of Bladder in Dye Workers

G. H. Gehrmann, Wilmington, Del. (*Journal A. M. A.*, Oct. 31, 1936), points out that the first aniline tumors of the bladder to be reported in this country were detected in 1931. Prior to 1914 European countries, principally Germany, manufactured about 80 per cent of the entire output of dyes. It was subsequent to 1914 that the dye industry was developed on a large scale in this country. A period of sixteen years elapsed before the first aniline tumors developed to the point of recognition in America. This period closely corresponds to the average time of exposure necessary to produce these tumors. Although it is accepted that certain chemical compounds of the nitro and amino group are responsible for the production of papillomas and carcinomas of the urinary bladder, the exact nature of these compounds is by no means clearly understood; neither is the mechanism of development. Experimental production of tumors of the bladder has been attempted for many years with predominantly unsuccessful results. The most important route of entrance is the respiratory tract, in the form of dust and fumes. Aniline is readily absorbed through the skin. The skin absorption of solid compounds such as *alpha* and *beta* naphthylamine is questionable. Absorption through the gastro-intestinal tract is probably of the least importance. However, it must be remembered that present knowledge indicates a long period of exposure to low concentrations as an etiologic factor. Therefore, any gastro-intestinal absorption

should be considered as of more or less importance, despite the low solubility of these compounds. The age distribution in twenty-four cases of carcinoma show a somewhat higher incidence after 30, but this no doubt is due to the insufficient time of exposure prior to that age. Five years appears to be the minimum and twenty-five years the maximum time of exposure for the development of tumors. The maximal period of exposure—twenty-five years—represents the maximal period of exposure in the present series. More cases may develop as time goes on. These tumors continue to develop even after the patient is no longer exposed. In Germany they have occurred as long as twenty-five years after workers have changed their occupation. The classic symptoms of tumors of the urinary bladder are hematuria, frequency, urgency, burning and pain. These symptoms as a group occur in the author's experience only in those cases which are well advanced. The diagnosis in this series was made by periodic cystoscopic examination and the classification of the tumors by biopsy. Prior to cystoscopic examination, five of the twenty-four carcinomas showed hematuria. Symptoms of frequency, urgency and burning were so inconsistent as to be almost negligible as a diagnostic aid. It has been his experience that cystoscopic examination is the only safe method of early diagnosis of these tumors. Tumors may be single or multiple, papillary or sessile, infiltrating or noninfiltrating, ulcerating or nonulcerating, malignant or benign. The histologic structure and treatment of aniline tumors does not differ from tumors of unknown etiology. Proper methods of plant control and medical supervision will eliminate their incidence. Exhaust ventilation designed to remove any dust or fumes that may escape from any of the equipment is essential. The final disposition of exhausted air is extremely important and the ventilation discharge should be sufficiently remote from all operations to prevent contamination in any area of the plant. Adequate measures of production in Germany have so successfully protected the workers that no new cases have developed in men who have been employed in these factories since the installation of their protective facilities. Every applicant for work in areas where he will be ex-

posed to aniline, alpha and beta naphthylamine and benzidine should have a cystoscopic examination in addition to a regular complete physical examination. Any disease of the genito-urinary system is a contraindication to employment, as is family history of cancer, history of hematuria or venereal disease. No applicant for this type of work should be accepted who is less than 21 or more than 40 years of age. All workers should have a complete physical examination and cystoscopic examination once a year.

BOOK REVIEWS

The Surgical Technic of Abdominal Operations. By Julius L. Spivack, M. D., Assistant Professor of Surgery, University of Illinois. Pp. 718, with 677 illustrations. Cloth. Price, \$10.00. Chicago: S. B. Debour, Publishers, 1936.

This work is exceptionally complete for a one-volume work on this subject. All the main operations are described step by step, as well as many that are performed only occasionally. The text is singularly clear and explicit, and frequently includes an historical introduction; it always concludes with an excellent bibliography. To many readers, however, the chief merit of the book will be the illustrations, which are unusually well done and are drawn to a scale that permits inclusion of detail without confusion of the main point, making the book in effect a pictorial atlas as well as a technical manual. This is one of the books that every abdominal surgeon will want.

Arthritis and Rheumatic Disease. By Maurice F. Lautman, M. D., Consultant, U. S. P. H. S. Pp. 177, with 12 illustrations. Cloth. Price, \$2.00. New York: McGraw-Hill Book Company, 1936.

In this book the author has very successfully attempted to place the whole picture of arthritis before the lay mind in such a way that it will be very easy for anyone to assimilate. He is perfectly fair in the handling of this most difficult problem. He states frequently enough that arthritis is still far from a solved problem and makes the most timely statements, in view of present medical tendencies, that each case of arthritis must be considered an individual problem in itself and that there cannot possibly be any "cure-all" for such a manifold disease.

The first half of the book deals with the history and nature of arthritis, the second half

with the treatment. In the last three chapters he stresses the need for mutual cooperation and courage between the patient and the physician.

All in all this is a book that can be recommended to any patient suffering from this disease. The physician will do well if he reads it himself.

Nutrition and Therapeutic Values of the Banana—a Digest of Scientific Literature. Pp. 143. Paper. Boston: United Fruit Company.

The title describes this publication of the Research Department of the United Fruit Company. The work digests 292 publications, and is fully indexed.

On the Witness Stand: the Evidence on Compulsory Health Insurance. By J. Weston Walch. Pp. 60. Paper. Price, 10 cents. New York: Medical Society of the State of New York, 1936.

This is a new publication of the Public Relations Bureau, Medical Society of the State of New York, and contains a discussion of compulsory health insurance in the form of questions and answers, of which there are 107.

Mr. Walch will be remembered as the general manager of the Platform News Publishing Company, Portland, Maine. Last year, during the high school debate on the subject of state medicine, his company provided students with handbooks and supplemental material on both sides of the question. At the outset, when he read the subject for debate, his first inclination was to say, "it sounds like a great idea—something the country needs." But as he went into the question he became convinced, as many other debaters were, that America had better have none of it. "The evidence we were facing," says Walch, "despite our attempts to continue neutral, plainly indicated that compulsory health insurance does not render efficient and satisfactory medical service."

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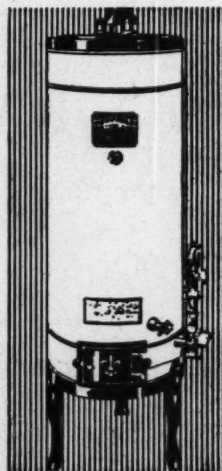
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